

**Cousineau Wood Products of Maine, LLC  
Somerset County  
North Anson, Maine  
A-103-71-J-T/A**

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #1**

After review of the air emissions license amendment application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

1. Cousineau Wood Products of Maine, LLC has requested the transfer of Air Emission License A-103-71-I-R from Sonoco Products Co. to Cousineau Wood Products of Maine, LLC (Cousineau) through a letter to the Bureau of Air Quality dated December 26, 2001. The facility is a lumber manufacturer. Air Emission License A-103-71-I-R was issued to Sonoco Products Co. on April 24, 2001.
2. Cousineau has requested an amendment to their license in order to permit the installation of three diesel generators. Cousineau will accept a reduction in the fuel cap for Boiler #1 to keep the permitted annual emissions of CO below 100 ton/year.
3. Cousineau has requested an amendment to their license in order to increase the throughput in their drying kilns from 5 million board feet per year to 7.5 million board feet per year.

**B. Transfer Information**

1. The full name and address of the new owner is:

Cousineau Wood Products of Maine, LLC  
P.O. Box 58  
North Anson, ME 04958

The closing date for the purchase was October 26, 2001 and Cousineau has assumed all obligations of the facility. A copy of the deed was submitted to the Bureau of Air Quality in a letter dated December 26, 2001.

2. Cousineau states that they possess the technical and financial capacity to operate the facility. Cousineau has retained the employees who were previously responsible for operation and oversight of these emission units when they were owned and operated by Sonoco Products Co. Thus, the applicant feels confident that there is sufficient expertise in running the plant so as to operate completely within compliance with the license.

C. Emission Equipment

Cousineau is licensed to operate the following new equipment in addition to their currently licensed emission units:

**Fuel Burning Equipment**

<b><u>Equipment</u></b>	<b><u>Maximum Capacity (MMBtu/hr)</u></b>	<b><u>Maximum Firing Rate (gal/hr)</u></b>	<b><u>Power Output (kW)</u></b>	<b><u>Fuel Type, % sulfur</u></b>
Generator #1	4.0	29.2	365	diesel fuel, 0.05%
Generator #2	4.0	29.2	365	diesel fuel, 0.05%
Generator #3	2.34	17.1	225	diesel fuel, 0.05%

D. Application Classification

The modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as given in Maine’s Air Regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

<b><u>Pollutant</u></b>	<b><u>Current License (TPY)</u></b>	<b><u>Future License (TPY)</u></b>	<b><u>Net Change (TPY)</u></b>	<b><u>Sig. Level</u></b>
PM	53.7	52.4	-1.3	100
PM <sub>10</sub>	53.7	52.4	-1.3	100
SO <sub>2</sub>	4.2	4.4	0.2	100
NO <sub>x</sub>	22.4	41.2	18.8	100
CO	82.6	99.8	17.2	100
VOC	16.8	19.9	3.1	50

This modification is determined to be a minor modification and has been processed as such.

## II. BEST PRACTICAL TREATMENT (BPT)

### A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Department regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in Chapter 100 of the Air Regulations. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

### B. Boiler #1

Cousineau operates Boiler #1 for facility heat and for process heat for the kilns and paint booths. Cousineau has accepted a reduction in the fuel limit for Boiler #1 in order to keep the licensed limits for CO below 100 ton/year.

A summary of the BPT analysis for Boiler #1(27 MMBtu/hr) is the following:

1. The total fuel use for Boiler #1 shall not exceed 24,000 ton/year of wood waste at 50% moisture, based on a 12-month rolling total.
2. Cousineau shall calculate the fuel use for Boiler #1 using the following formula:

$$\frac{(\quad) \text{ gal water}}{\text{day}} \times \frac{8.34 \text{ lb steam}}{\text{gal water}} \times \frac{0.0003 \text{ ton wood}}{\text{lb steam}} = \frac{\text{ton wood}}{\text{day}}$$

3. Chapter 103 regulates PM emission limits. The PM<sub>10</sub> limits are derived from the PM limits.
4. Cousineau shall continuously use the cyclone to control particulate matter when operating Boiler #1.
5. NO<sub>x</sub> emission limits are based on data from similar #2 fired boilers of this size and age.
6. SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC emission limits are based on a previous modeling analysis.

7. Visible emissions from Boiler #1 shall not exceed 30% opacity on a 6-minute block average, except for no more than (2) six-minute block averages in a continuous 3-hour period.

**C. Generators**

Cousineau operates three diesel generators for prime power production. A summary of the BPT analysis for Generator #1 and #2 (365 kW each) and Generator #3 (225 kW) is the following:

1. The total fuel use for Generators #1, #2, and #3 shall not exceed 105,000 gal/year of diesel fuel, based on a 12-month rolling total, with a maximum sulfur content not to exceed 0.05% by weight.
2. Generator #3 shall be limited to 5,600 hr/yr of operation based on a 12-month rolling total. Compliance shall be demonstrated by a written log of all operating hours for Generator #3.
3. Chapter 106 regulates fuel sulfur content, however in this case a BACT analysis for SO<sub>2</sub> determined a more stringent limit of 0.05% was appropriate and shall be used.
4. The PM limits for Generators #1 and #2 are based on Chapter 103. PM limits for Generator #3 and the PM<sub>10</sub> limits are derived from Chapter 103.
5. NO<sub>x</sub>, CO, and VOC emission limits are based upon guarantee not to exceed data provided by Caterpillar for these engine models.
6. Visible emissions from the generators shall not exceed 20% opacity on a 6-minute block average, except for no more than (2) six-minute block averages in a continuous 3-hour period.

**D. Kilns**

Cousineau operates two kilns for drying lumber. Heat for the kilns is provided by either Boiler #1 or Boiler #2. A summary of BPT for the drying kilns is the following:

1. Cousineau shall not exceed a yearly throughput in the kilns of 7.5 million board feet per year (equates to 8.5 ton/year VOCs) based on a 12-month rolling total.
2. Cousineau shall keep monthly records of board feet processed.

E. Annual Emission Restrictions

Cousineau shall be restricted to the following annual emissions, based on a 12-month rolling total:

**Total Allowable Annual Emission for the Facility**  
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
PM	52.4
PM <sub>10</sub>	52.4
SO <sub>2</sub>	4.4
NO <sub>x</sub>	41.2
CO	99.8
VOC	19.9

### III.AMBIENT AIR QUALITY ANALYSIS

Cousineau previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this renewal.

## ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-103-71-J-T/A subject to the conditions found in Air Emission License A-103-71-I-R and in the following conditions:

**The following shall replace Condition (16) of Air Emission License A-103-71-I-R:**

(16) Boiler #1

- A. Fuel use for Boiler #1 shall not exceed 24,000 ton/yr of wood waste at 50% moisture (12-month rolling total). Fuel records, including amount of fuel fired shall be maintained on a monthly basis in addition to the 12-month rolling total.
- B. Cousineau shall continuously use the cyclone to control particulate matter when operating Boiler #1.
- C. Cousineau shall not operate Boiler #1 and Boiler #2 simultaneously at any given time except for periods of start-up and shut-down.
- D. Emissions shall not exceed the following:

Equipment		PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boiler #1	lb/MMBtu	0.47	-	-	-	-	-
	lb/hr	12.69	12.69	0.54	4.59	19.71	0.54

- E. Visible emissions from Boiler #1 shall not exceed 30% opacity on a 6-minute block average, except for no more than (2) six-minute block averages in a continuous 3-hour period.

**The following shall replace Condition (19) of Air Emission License A-103-71-I-R:**

(19) Kilns

- A. Cousineau shall not exceed a yearly throughput in the kilns of 7.5 million board feet per year based on a 12-month rolling total.
- B. Cousineau shall keep monthly records of board feet processed.

The following are new Conditions:

(27) **Generators #1, #2, and #3**

- A. The total fuel use for Generators #1, #2, and #3 shall not exceed 105,000 gal/year of diesel fuel, based on a 12-month rolling total, with a maximum sulfur content not to exceed 0.05% by weight. Fuel records, including gallons of fuel used and percent sulfur, shall be maintained on a monthly basis in addition to the 12-month rolling total.
- B. Generator #3 shall be limited to 5,600 hr/yr of operation based on a 12-month rolling total. Compliance shall be demonstrated by a written log of all operating hours for Generator #3. An hour meter shall be installed and operated on Generator #3.
- C. Emissions shall not exceed the following:

Equipment		PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Generator #1	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.48	0.48	0.20	10.92	11.44	0.20
Generator #2	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.48	0.48	0.20	10.92	11.44	0.20
Generator #3	lb/hr	0.28	0.28	0.12	7.14	1.05	0.07

- D. Visible emissions from Generators #1, #2, and #3 shall each not exceed 20% opacity on a 6-minute block average, except for no more than (2) six-minute block averages in a continuous 3-hour period.

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- (28) Cousineau shall pay the annual air emission license fee within 30 days of January 31<sup>st</sup> of each year. Pursuant to Title 38-353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under section 341-D, subsection 3.
- (29) This amendment shall expire concurrently with Air Emission License A-103-71-I-R.

DONE AND DATED IN AUGUSTA, MAINE THIS                      DAY OF                      2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/11/02

Date of application acceptance: 1/29/02

Date filed with the Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Lynn Ross, Bureau of Air Quality.